



# Customizable measuring spoon and cup [OpenSCAD]

 **Mad Mechatronic**

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## Summary

It all started with the need for a measuring cup with 32ml in custom dimensions for the screen wash concentrate bottle..

[Household](#) > [Kitchen](#)

Tags: [customizable](#) [openscad](#) [measuringspoon](#) [measuringcup](#)

**The STLs are just samples. They are both the same but for the label. One is the default and one is the multi color option. Please create your own models. There are to many options with just dimensions and volumes combined to provide an STL for everyone.**

**Please don't use PLA for any detergent. It's not considered to be chemically resistant and may degrade quickly. Please use something more resistant like PETG, PCTG, PA6.6, PA12, PP.**

Spoon and cup are designed to be printed entirely without supports. With the cup it depends on your parameters and the resulting overhang angle and top surface.

- The cup is cylindrical with optional spout above the target fill mark. There are also options for intermediate markings. The quantity is that of the markings. If you want i.e. quarters then use 3
- The Spoon is conical for easy printing and has no markings (might be added later). The volume is the entire spoon. The rounding of the tip is optional as it can add a lot of unused height with bigger top diameters.
- Both models are based on a target volume in ml/cm<sup>3</sup>. The cup requires the inner diameter. For the spoon it's the diameter of the opening and you can choose between the diameter at the top (default) or the internal height as secondary dimension.
- There is some output (especially the cup) with some calculated dimensions and angles.
- Labels can be selected and default to the chosen volume. There is also an option for a custom label text. You can change font and size of the text.
- The multi color option will fill the void with a tiny (0.01mm) gap so you can use the filler painting option in the slicer but there won't be a gap between the colors in the printed part
- I have checked the nominal volumes of my printed parts. They're within +/-1ml at the mark (cup) or all the way full (spoon). Checked with water and some lab measuring cylinders. More than good enough for what I need.

**If you find a bug, please let me know so I can fix it for everybody.**

### **Update 20251113:**

Fixed an issue with the measuring cup and openSCAD 2021.01. In the stable release it's still required to name the angle parameter with `rotate_extrude`. Thanks [@markwal\\_498340](#) for informing me although it took a while to get to it

## **Model files**



**Spoon**

3 files



**measuringspoon.scad**

**measuringspoon95m\_multil.stl**



**measuringspoon95ml.stl**



**Cup**

3 files



**measuringcup.scad**

**measuringcup32mlscreenwash\_multi.stl**



**measuringcup32mlscreenwash.stl**



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